

Perceived Versus Actual Risk

Grades

7 - 8

Subjects

Health, Science

Duration

30 – 45 minutes

Materials

- Understanding Risk handout
- Perceived Risk / Actual Risk handout
- Actual Risk overhead

Objective

Students will be able to understand the difference between voluntary versus involuntary risk.

Students will recognize factors that account for the difference between perceived and actual risk.

Set

Ask students which of the scenarios listed below puts them at greatest risk to their health and safety.

1. Being forced to live in a house located one mile away from a nuclear power plant.
2. Playing with fireworks.

Playing with fireworks is by far more risky than living next to a nuclear power plant. Each year, there are thousands of reported serious injuries in the United States associated with fireworks. To date, only 3 deaths have been attributed to nuclear power plants in North America despite the potential for increased risk of developing cancer. However, many students will choose living next to the power plant as the riskier of the two scenarios. Why? One of the reasons is that playing with fireworks is a voluntary act. Many students will assume that because a choice is involved in the scenario the risk of the action will be reduced. This is not necessarily so as the following exercise will demonstrate.

Instructional Input

Distribute the Understanding Risk handout. Allow the class time to read the document and then discuss. Clarify any questions about the risk factors discussed by soliciting examples from the class.

Hand out the perceived versus actual risk worksheet. Have the students complete the “Perceived Risk” side of the table only and then stop. Once all students have completed the table, determine which actions the class ranked as being the most risky and the least risky (take a hand tally). Next, display the answer key (Actual Risk) on the overhead and allow the class to fill in their papers. Allow the class time to compare their perceptions of risk with the actual risk ranking. Ask them to complete the Accept or Reject column and be prepared to share their reasons. Students should pay special attention to the actual risk of an activity before choosing to accept the risk. For instance, many people ride motorcycles. However, would they still choose to do so if they knew the actual risk they were taking? Accepting the risk means continuing the activity with no change in behavior. Rejecting the risk means a person may have to alter their behavior to avoid the risk.

Evaluation

Have students complete the questions on the back of the Perceived versus Actual risk sheet.

Closure

Ask students why they would accept or reject certain risks as listed on their sheets. Listen for factors that affect risk perception listed in the Understanding Risk handout. Make sure you point those factors out to the class as they come up.

Have students hand in their papers.